

Monuments Database - update -

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SMWCon Fall 2016, Frankfurt



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DIQA is an independent software vendor of knowledge management tools for ECM portals.

Our vision:

We provide our customers with services and products that turn their ECM portals into *smart portals* by introducing semantic web technologies. Smart portals let end-users better find, organize, process, control and govern unstructured content.

Founded: 2012

Team: SharePoint, MediaWiki, knowledge management and semantic web specialists

Location: Germany, Karlsruhe



- The Project Sponsor
 - Project Overview
 - Goals of the System
 - Why an SMW-based System?
- Current Status
- Demo
- Implementation
 - Data Model
 - Architecture
 - Challenges
 - Opportunities

- Kantonale Denkmalpflege, Zürich
 - Built Heritage Service of the Canton
 - Part of the administration of Canton
 - Legal mandate to preserve all historical monuments in Canton
- Manages about 5.700 monuments like churches, parks, mills, bridges etc
- Tasks
 - Consulting services for owners
 - Maintenance of the register of the Canton's monuments
 - Documentation of history and current conditions of monuments
 - Public relations: publications, guided tours

- Documentation
 - public presentations, publications, very detailed
- Consulting
 - Involved in construction permits and supporting owner with finding adequate treatment of buildings
- Inventory
 - collects basic data about all monuments/buildings, and descriptions of history, etc.

- Replaces existing database software
- Supports daily work of 3 departments
 - Maintain register of historical monuments
 - Integrate relevant data from other datasources
 - Provide means to generate reports
 - Reduce number of tools employed in daily work.

- Internal data:
 - Dozens of thousands of records about monuments
 - Thousands of documents on fileshares
- External data
 - Images: >35000 Images in Imagic IMS (quickly growing)
 - Geographic data (GIS): ownership-, geolocation-data for all buildings, houses
 - Insurance information
 - Land Register Data (Kataster)
 - Other Databases

- Short timeframe from design to operation
- Inexpensive in procurement and operation
- User friendly
- Support for mobile devices
- Open source and non-proprietary product, available for other cantons for free
- Easy publishing of documents on the internet

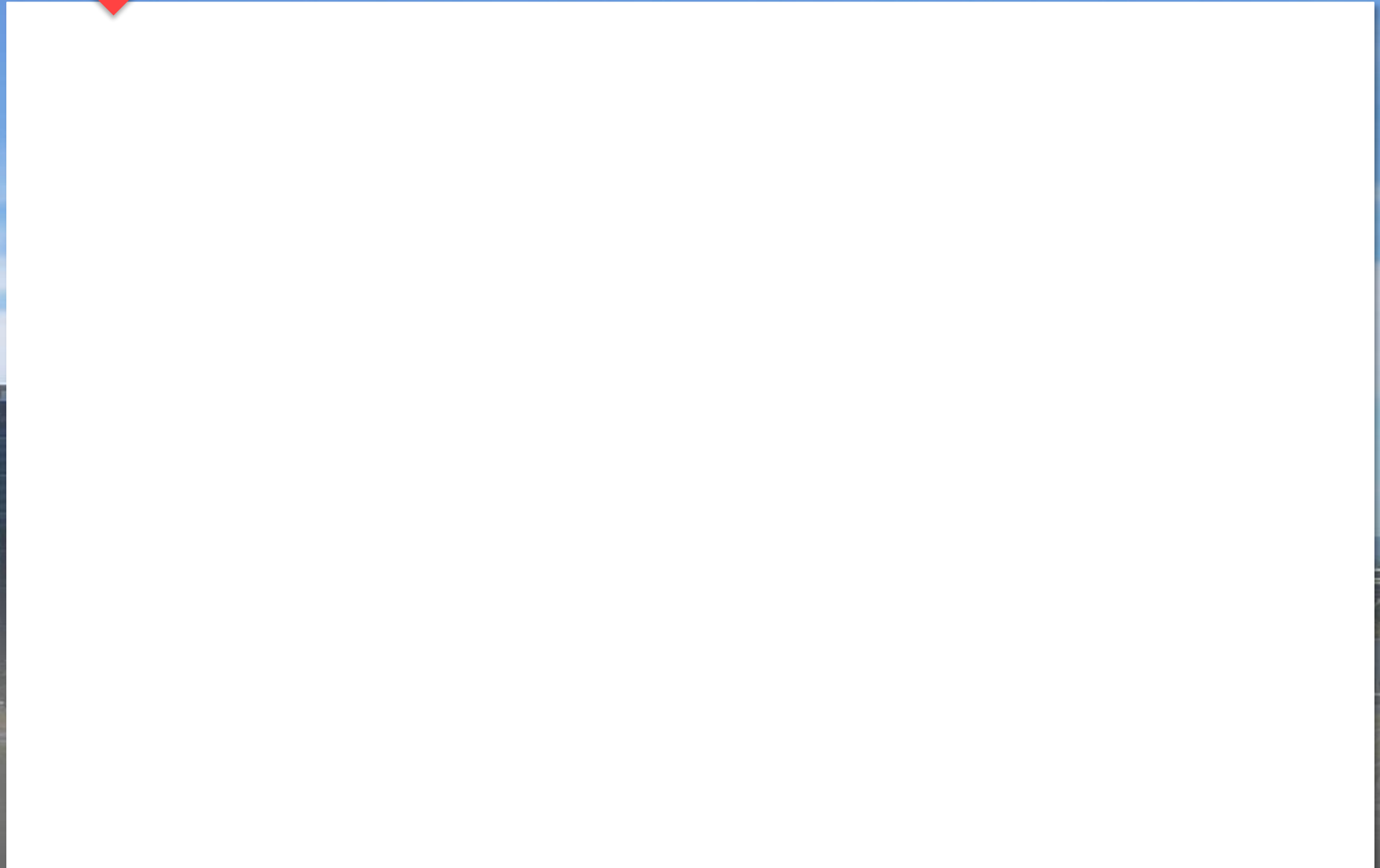
Why an SMW-based System?

- MediaWiki
 - Standard platform
 - Free and open source
 - Non proprietary
 - No binding to ONE company
 - Available consultants and developers
- Semantic MediaWiki
 - Ideal combination of Data and Text
 - Flexibility due to explicit data
 - Extensibility for future requirements
- Solution can be shared with other cantons or cities

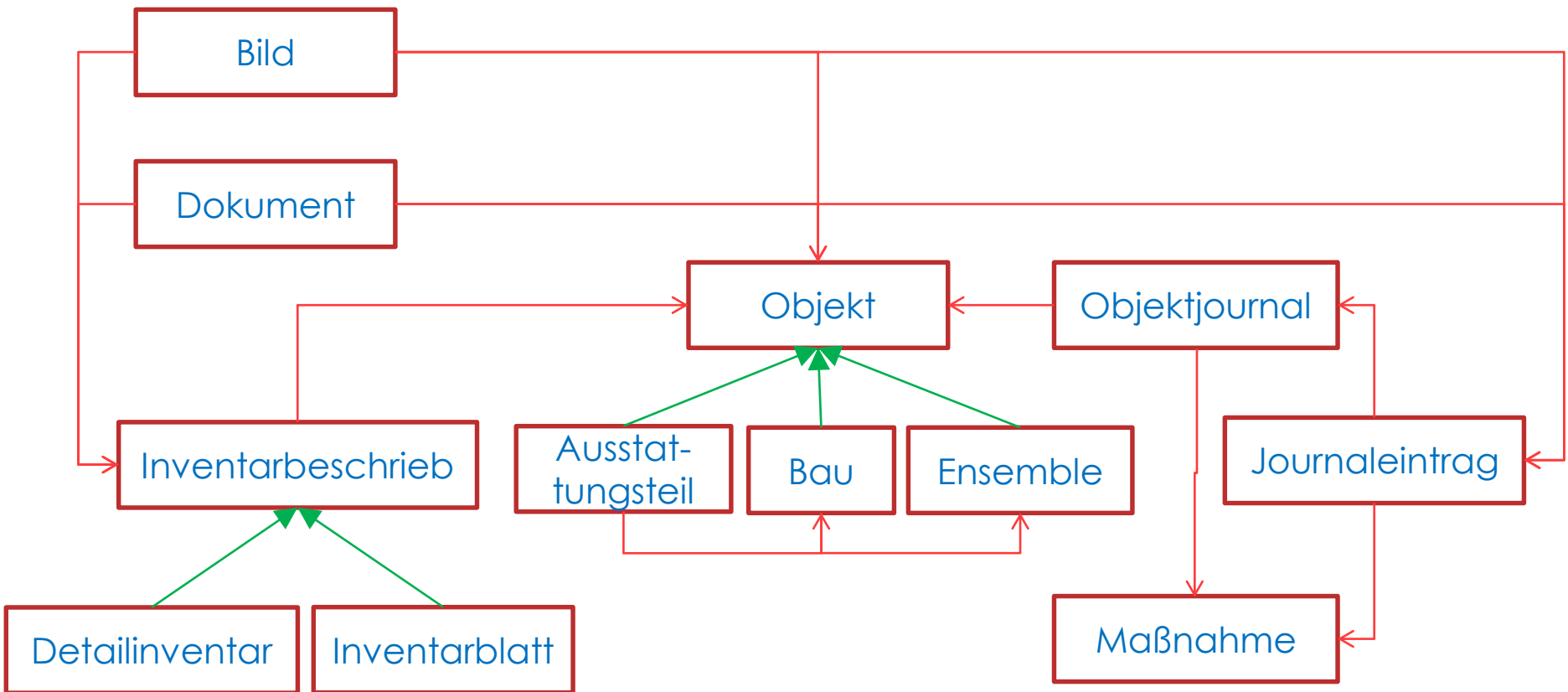
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- Design phase (finished)
- Implementation phase (ongoing)
 - Software delivery
 - Functional tests
 - End-user acceptance tests
 - Re-work and scope changes
- Next phase will be integration tests
 - Integration with migrated legacy data and data from external data sources
 - Acceptance tests

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- MediaWiki
 - v 1.23.x (LTS, long term support)
- Semantic MediaWiki
 - v 2.0
- SemanticForms, Semantic Forms Input
- SemanticTitle
- EnhancedRetrieval on top of SOLR
- Some new software developments required
 - Extensions (PHP)
 - Java-Script features

- Third party systems/data
 - Migrating legacy data
 - Accessing external systems
 - Integration of GIS-Brower
- Non-technical users
 - Wiki-markup is a no-go
 - Layout and visual appearance are important
 - Forms and Richtext editors, only
- Workflow and access control
 - Protecting pages and properties (access control)
 - Status of documents
 - Revision control, e.g. querying old-versions

- Propagation of metadata
 - E.g. the inventory inherits metadata from the building (to allow for retrieving inventory using building-attributes)
- Separation of title and pagename
 - Semantic title extension helped
 - Autocompletion on titles
- Bugs in standard (open source) tools
 - Not many, but painful

- The stack comprises stable products
 - Industry grade
 - Minimal bugs, responsive community (thank you!!!)
- Modern user interface
- Very short turn around times for custom development
 - Fast prototyping
 - Endless customizability in php, wikitext and javascript.
- Blending of text and data
 - Flexible handling of data structures and query capabilities

- Questions?
- Discussion!

Thank you for your attention!
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